



i-Series
User Manual – v2.0



i-1
i-2
i-8
i-12

EM Acoustics Loudspeakers

Building 74, Dunsfold Park
Cranleigh, Surrey
GU6 8TB, UK

Phone +44 (0) 1483 266520

Fax +44 (0) 1483 275619

www.emacoustics.co.uk

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1

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CONTENTS

Introduction

Thank you	3
Unpacking	3
Declaration of Conformity	3

Product Range Overview

i-1 ultra-compact satellite enclosure	4
i-2 ultra-compact fullrange enclosure	4
i-8 ultra-compact subwoofer enclosure	5
i-12 compact subwoofer enclosure	5

System Set-up

Safety Considerations.....	6
Cabling & Amplifier selection	7

Mounting & Rigging Options

Rigging Hardware & Accessories	8
Permanent Installations	8
i-1 Rigging Accessories	9
i-2 Rigging Accessories	9

DA-1 Amplifier Installation

i-12 Subwoofer	11
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Maintenance

i-1 Drive Unit Service	12
i-2 Drive Unit Service	12
i-8 Drive Unit Service	13
i-12 Drive Unit Service	14

Warranty	15
----------------	----

Appendix A – Technical Specifications	16
---	----

INTRODUCTION

Thank you

Thank you for purchasing a product from the i-Series from EM Acoustics. The i-Series products have been carefully designed and rigorously tested to ensure years of flawless operation and unprecedented sonic quality. Designed primarily for discreet installation use, the i-Series products find applications from cafes and bars through to museums, nightclub infills and themed attractions.

Please ensure that you read this manual carefully before use, and that you keep it to hand should you need it for further reference. Furthermore, should you have any difficulties please do not hesitate in contacting your EM Acoustics dealer, or email info@emacoustics.co.uk for further assistance.

Unpacking

Every EM Acoustics product is built to the highest standard and thoroughly tested before it leaves our factory. After unpacking your loudspeaker, please inspect it carefully for any signs of transit damage. If such damage is found, please notify the carrier at once to instigate a claim. It is suggested that you retain all packaging for future re-shipment.

DECLARATION OF CONFORMITY



The products contained within this manual conform to the requirements of the EMC Directive 89/336/EEC, amended by 92/31/EEC and to the requirements of the Low Voltage Directive 73/23/EEC amended by 93/68/EEC.

Standards Applied:

EMC	Emission	EN55103-1:1996
	Immunity	EN55103-2:1996
Electrical Safety		EN60065:1993

RECYCLING



This product and its packaging constitute the applicable product according to the WEEE directive. Please ensure that at the end of the working life of this product, it is disposed of sensibly in accordance with local and national recycling regulations. The packaging supplied with this product is recyclable. Please retain all packaging, however if disposing of this packaging please ensure that you comply with local recycling regulations. These products also all comply to the RoHS Directive 2002/95/EC.

PRODUCT RANGE OVERVIEW

i-1 Ultra-Compact Satellite Loudspeaker



The i-1 is a compact, satellite mid/high loudspeaker, designed for a wide variety of discreet sound reinforcement applications from museums and themed attractions through to infills in nightclubs and bars. It contains a single 4" (102mm) titanium cone drive unit, with integral passive circuitry for unprecedented sonic performance from an enclosure type where compromises are usually made. Small enough to be easily concealed, yet with enough SPL output to be of use in low to medium SPL applications.

As with all EM Acoustics products, no external equalisation is required to make the i-1 perform as specified. A high-pass filter set at 125Hz (24dB/Octave minimum) is recommended to prevent the drive unit from over-excursion.

i-2 Ultra-Compact Fullrange Loudspeaker



The i-2 is an ultra-compact fullrange loudspeaker, designed specifically for applications where controlled, accurate dispersion is required. The use of a 4" x 1" planar wave drive unit for HF allows the i-2 to produce a coverage pattern of 90° x 20°, which can be rotated to allow use in any orientation. Innovative passive crossover technology creates perfect time alignment between the three components, and avoids the interference lobing normally encountered with such designs.

As with all EM Acoustics products, no external program or equalisation is required for the i-2 to function correctly. However, for higher-SPL applications a high pass filter set above 50Hz is recommended.

i-8 compound isobaric subwoofer



The i-8 is a subwoofer designed to create the depth and authority in low frequencies that is normally associated with large systems, but in a compact package for ease of installation. Consequently, the i-8 has a frequency response down to 35Hz yet is small enough to be concealed underneath sofas or in small wall cavities. The i-8 - although small in size - has enough SPL output to be of use for nightclub or corporate applications, and even for small FOH systems underneath EMS-81 enclosures. The i-8 subwoofer houses four 8" (203mm) long excursion low frequency drive units, arranged as two isobaric pairs. This loading allows the enclosure to reproduce frequencies not normally achieved from an enclosure of this size.

The enclosure is fitted with sixteen M10 threaded fixings, to allow overhead suspension in applications where floor space is not available. Standard connectors for the i-8 are Neutrik Speakon™ NL4MP, although alternatives can be supplied on request.

As with all EM Acoustics products, no external equalisation is necessary to get the enclosure to perform as specified. An active low pass filter is however required below 150Hz for correct operation.

i-12 compound isobaric subwoofer

DA-1 Ready



The i-12 is the bigger brother of the i-8, and utilises the same enclosure technology. Four high power, long excursion 12" (305mm) drive units are contained within the compact enclosure, again arranged in a compound isobaric format. This loading allows the i-12 to effortlessly reproduce frequencies as low as 25Hz, with more SPL available than the smaller i-8. The enclosure comes supplied with heavy-duty castors and steel bar handles as standard, and as with other EM Acoustics products is fitted with Neutrik Speakon™ connectors as standard. The i-12 can also accept the DA-1 digital power amplifier module.

As with all EM Acoustics products, no external equalisation is necessary to get the enclosure to perform as specified. An active low pass filter is however required below 100Hz for correct operation.

SYSTEM SET-UP

Safety Considerations

Loudspeaker systems are potentially dangerous objects if used incorrectly. Please ensure that you read this section fully, and contact EM Acoustics or your local dealer should you be in any doubt over correct operation procedures.

Professional loudspeaker systems are capable of producing damage-inducing sound pressure levels, and hence care should be taken when setting your system up, particularly when it comes to loudspeaker placement within a venue. Damage to the ear can result from levels above 90dB under prolonged exposure.

Stand Mounting

The i-1 yoke has a hole for microphone stand mounting, and the i-2 has two 3/8" threaded fixings for microphone stand mounting. When mounting in this way, please consider the following:

- Ensure your stand height is locked off and the tripod legs are positioned so as to be stable.
- Check the weight loading of your stands before attempting to mount the loudspeaker.
- Do not stack a second loudspeaker on top of the stand-mounted one.
- Ensure cables are run so as to leave enough slack to enable neat wiring, and thus reduce the risk of the speaker being pulled over. Loose cables should be covered or taped down wherever possible to reduce trip hazards.
- If stands are being used outdoors, it may be necessary to add ballast to the base of the stand to prevent it toppling over.

Ground Stacking

- Ensure that the floor or stage surface can withstand the weight of the system.
- Wherever possible, avoid high stacks and use ratchet straps to secure loudspeakers together. Please also remember that vibrations from subwoofer systems can shake other loudspeakers out of place, which may present a toppling hazard. The use of ratchet straps and non-slip material is recommended to prevent this.

Rigging and Suspension

There are a variety of different methods for suspending your i-Series enclosures – please see the detailed section on Page 8 for further information.

WARNING: The overhead suspension of loudspeakers is a very serious issue with potentially lethal consequences should anything go wrong. Rigging should only be carried out by experienced

personnel following safe working practice. Should you be in any doubt whatsoever, please contact your local dealer who will be able to refer you to a suitable rigging company.

Cabling and Amplifier Selection

The i-Series products are designed to be used with professional power amplifiers providing the following power outputs:

i-1 80W/channel **into eight ohms**

i-8 1000W/channel **into four ohms**

A small power amplifier working too hard is more likely to damage a loudspeaker than a large power amplifier working within its operating range!

It is good practice to use an amplifier equal to the program power rating of the loudspeaker – so as to retain sufficient headroom and good dynamic range. Care should be taken during operation to avoid amplifier clipping – as this can cause serious damage to your loudspeakers. If in doubt, please contact your dealer who will be happy to assist you in correct amplifier choice and setup.

Cabling

i-2 loudspeakers and i-8/i-12 subwoofers are supplied with Neutrik Speakon™ NL4 connectors, wired pin 1+/1-. i-1 satellite enclosures are supplied with 4mm binding posts (red positive, black negative). It is recommended that the resistance of your cable is less than one tenth of the nominal system impedance. Given below are the recommended maximum cable lengths for different cross-sections and impedances.

Conductor Cross Sectional Area	Maximum Recommended Cable Length		
	<i>4 ohms</i>	<i>8 ohms</i>	<i>16 ohms</i>
1.0mm ²	11m	22m	44m
1.5mm ²	17m	34m	68m
2.0mm ²	22m	44m	88m
2.5mm ²	29m	58m	116m
4.0mm ²	44m	88m	176m
6.0mm ²	66m	132m	264m

MOUNTING & RIGGING OPTIONS

Rigging Hardware & Accessories

The i-Series loudspeakers have a range of integral rigging hardware to enable usage in a wide variety of ways.

The i-1 is supplied with four M5 fixings (one on each side of the enclosure) and a steel yoke. This steel yoke attaches to either pair of fixings to provide pan & tilt options. The yoke has five mounting holes – four M5 holes are supplied for permanent installations (for affixing permanently using wall anchor bolts) and one central larger hole for either M12 bolts (hook clamps) or affixing to a 3/8" microphone stand thread.

The i-2 has three four different mounting methods available. A microphone stand can be used to mount the enclosure in either vertical or horizontal formats, whilst the four M6 points on the rear allow permanent installation with Omnimount™ or PowerDrive™ mounting hardware. Two rigging accessories are also available for the i-2 – the YK-i2 vertical hanging yoke, and the YK-i2h horizontal hanging bracket.

The i-8 contains sixteen M10 threaded fixings around the enclosure, to enable suspension using forged shoulder eyebolts with a minimum thread length of 20mm. With any suspension method, a second anchor point should be used as a safety.

The i-12 has no dedicated rigging options, as it is designed to be ground stacked only. If you have any special requirements, please contact your local EM Acoustics representative or else email info@emacoustics.co.uk with your enquiry.

Under no circumstances should the mounting points of one enclosure be used to suspend another enclosure below it. EM Acoustics are in no way responsible for the failure of incorrectly rigged systems. This information relates specifically to the rigging techniques for the i-Series enclosures only. If you are in any doubt about safe practices for rigging loudspeakers, please contact your local EM Acoustics dealer who will be able to advise you.

Permanent Installations

Any installation (permanent or temporary) must be securely attached to the structure of the building using chain, steel wire or web straps that are certified and load rated for the loudspeaker system. Consideration must be taken when determining the loading on the structure to include loudspeakers and rigging hardware, and the appropriate safety factor can then be decided upon. **If you are in any doubt whatsoever**, please contact your EM Acoustics dealer who will be able to refer you to an experienced rigging company. A reputable rigging organisation should also be able to advise on legislation regarding safety factors for suspended systems of this type.

Attachment and Adjustment of the YK-i1 yoke

The i-1 ships with the YK-i1 yoke attached in the normal operating plane. Should you wish to rotate the yoke (for example to utilise the trapezoidal enclosure shape to fit the i-1 closer into a corner), remove the two countersunk M5 machine screws in the enclosure, and remove the M5 socket-head bolts holding the yoke in place. The yoke can then be rotated and the bolts reinstated in the alternative points. Ensure to reinstate the countersunk bolts into the unused holes, otherwise the enclosure will leak.

Attachment of the YK-i2 vertical hanging yoke

Using a flat-blade screwdriver, remove the two M8 countersunk bolts on the flat side of the enclosure (marked "A" in Fig 1). Position the YK-i2 mounting plate over the two holes, reinstate the bolts and tighten securely. There are three hole positions for an attachment device in the top of the yoke (marked "B" in Fig 2). For permanent installation, these can be used to fix the YK-i2 directly to a surface. For temporary installation, a standard hook clamp is recommended. Attach this clamp or other suitable device using an M10 bolt, nut and washer set. The i-2 can now be securely suspended and oriented as required. By rotating the YK-i2 through 180 degrees, it can be used to allow down-tilt or up-tilt when using a microphone stand (Fig 3).

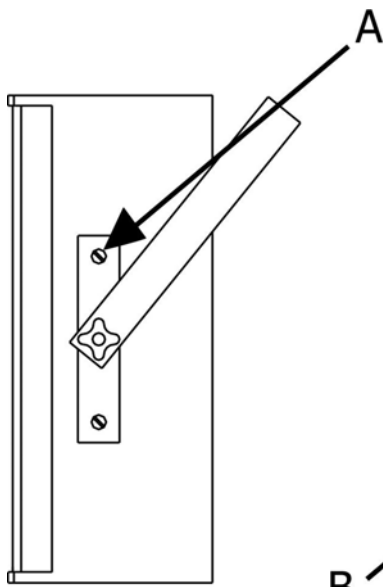


Fig 1

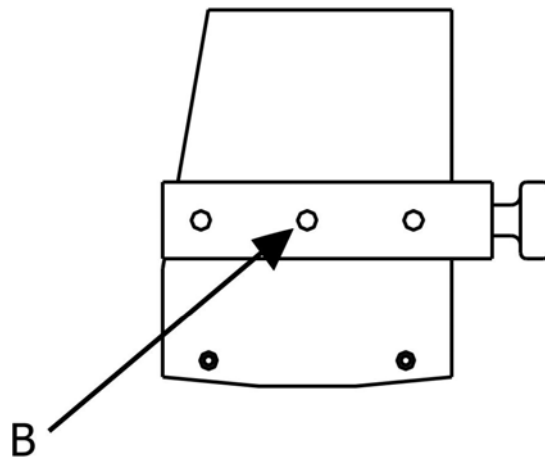


Fig 2

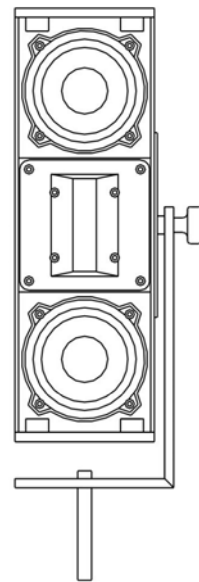


Fig 3

Attachment of the YK-i2h horizontal hanging yoke

With the i-2 lying on its side, remove the two countersunk M10 fixings in the ends of the enclosure (marked "A" in Fig 1) and put them in a safe place. Position the YK-i2h over the enclosure, insert the knurled plastic knobs into the holes and tighten securely. There are three possible positions for an attachment device – only the **central** point (marked "B") should ever be used by itself. If using the end points (marked "C"), **both** should be used to avoid unnecessary strain on the yoke.

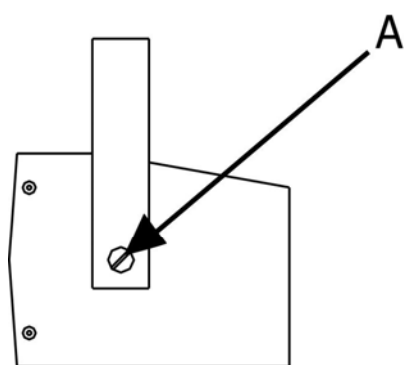


Fig 1

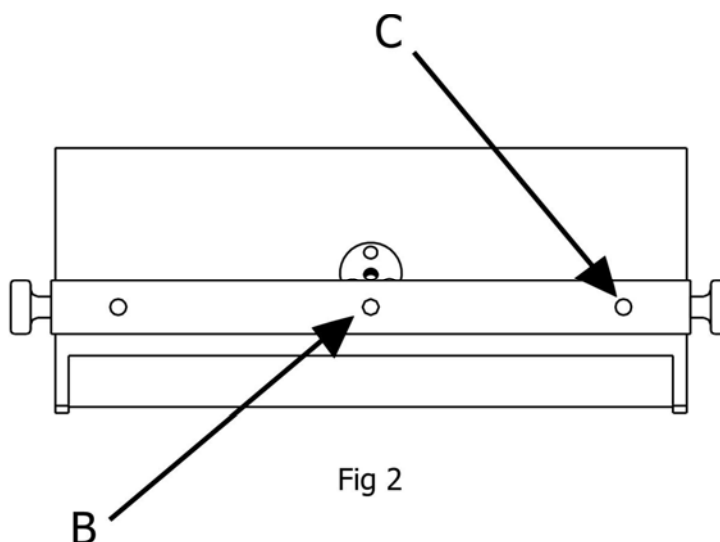


Fig 2

Attachment of Omnimount™ or Powerdrive™ Installation Brackets

It is strongly suggested that you position your loudspeakers, then mark & drill the holes in the mounting walls before you attach the bracket to the loudspeaker, as it is much easier to check positioning and fit of the holes without the weight of the loudspeaker.

The i-2 is designed to work with OmniMount™ Series 30 or PowerDrive™ Series 75 products.

Lie the enclosure on its front and remove the four M6 countersunk points on the rear of the enclosure. Position the loudspeaker-side of the bracket as required, reinstate the bolts and retighten. The bracket and i-2 can now be mounted using the holes you have pre-drilled.

Safety Considerations

When utilising any suspension method, a secondary safety must be used. For the i-1, wrap a safety steel cable around the yoke and then affix securely to your safety point. For the i-2, when using installation brackets or the YK-i2, a forged shoulder M10 eyebolt can be fitted into one of the points on the end of the enclosure, and this can be used to attach a safety. For use with the YK-i2h, use an M8 forged shoulder eyebolt in one of the M8 points on the sides.

Installation of the DA-1 Power Amplifier Module

The i-12 subwoofer can accept the EM Acoustics DA-1 digital power amplifier module. One DA-1 is used to drive one i-12, and in this configuration the DA-1 runs in two channel mode, with each pair of drive units driven by one channel.

To install the DA-1, lie the enclosure on its front. Using a 4mm Allen Key, carefully undo the six M5 socket head bolts holding the connector panel door in place on the rear of the enclosure. Remove the connector panel door and disconnect the four-pin connector on the cable. Put the connector panel aside for future reinstatement.

Connect the four-pin connector into the chassis socket on the bottom edge of the DA-1. Carefully place the DA-1 into the amplifier module housing within the i-12 enclosure, reinstate and retighten the M5 socket head bolts.

The DA-1 must be set to the i-12 program before use, otherwise severe damage can occur to your subwoofer. Please consult your DA-1 user manual for information on recalling programs, and a program listing.

MAINTENANCE

Your EM Acoustics loudspeakers have been rigorously tested before they leave our factory, to ensure that they give you a lifetime of flawless operation. Should any of your drive units fail and need replacing, please follow the guidelines below.

i-1: Fullrange Drive Unit

1. Using a No.2 Pozidrive screwdriver, remove the four pan-head screws that hold the front grille in place. Lift the grille clear, ensuring that you collect the four screws and the four chrome grille supports for reinstatement after service.
2. Using a No.2 Pozidrive screwdriver, remove the four pan-head screws holding the drive unit. Lift the drive unit out of the enclosure (you may need a flat bladed screwdriver to lift the driver up) and carefully disconnect the cables.
3. To reinstate the driver, simply reverse the above procedure. Please observe the correct polarity – red cable to positive terminal, black cable to negative.
4. Be sure to re-attach the grille, as the foam acoustic ring adhered to the grille is an integral part of the loudspeaker and they are not designed to function without the grilles.

i-2: LF/MF Drive Units

1. Using a 2.5mm Allen key, remove the four countersunk machine screws that hold the front grille in place. Lift the grille clear, ensuring that you collect the four screws for reinstatement after service.
2. Using a 3mm Allen key, remove the four socket-head screws holding the drive unit. Lift the drive unit out of the enclosure (you may need a flat bladed screwdriver to lift the driver up) and carefully disconnect the cables, ensuring to collect the washers for future reinstatement.
3. To reinstate the driver, simply reverse the above procedure. Please observe the correct polarity – red cable to positive terminal, black cable to negative (LF driver) or brown cable to positive terminal, blue cable to negative (MF driver).
4. To re-attach the grille, place it in position and carefully ease the grille over the gasket attached to the woodwork. Ensure that the gasket does not get caught as it will bunch up and stick to the grille. Once the grille is firmly in position, apply pressure to the ends by the mounting points and reinstate the four countersunk screws.

i-2: HF Drive Unit

1. Remove the grille as above.
2. Using a 3mm Allen key, remove the four socket-head screws holding the drive unit. Lift the waveguide out of the enclosure (you may need a flat bladed screwdriver to lift the waveguide up) and carefully disconnect the cables, ensuring to collect the washers for future reinstatement.
3. To remove the planar wave driver from the waveguide, use a 3mm Allen key in the socket head bolts through the waveguide, and hold the M4 Nyloc nuts at the rear with a 7mm spanner.

4. To reinstate the driver, simply reverse the above procedure. Please observe the correct polarity – white cable to positive terminal, yellow cable to negative.
5. Follow the procedure outlined above to replace the front grille.

i-8: Front Low Frequency Drive Units

1. Carefully remove the foam from the grilles – it is held in place with Velcro fasteners. Using a No.2 Pozidrive screwdriver, undo the four Pozidrive screws holding each grille in place, then remove the grilles to gain access to the drive units.
2. Using a 10mm socket, undo the four M6 Nyloc nuts holding the drive unit in place. Disconnect the cables, and lift the drive unit clear – ensuring to retain the four nuts, eight washers (shakeproof and flat for each bolt) and the four speaker clamps for future reinstatement.
3. To reinstate the drive unit, carefully place it into the locating slot, then simply reverse the above procedure. Please observe the correct (yet unusual) polarity – **red cable to negative terminal, black cable to positive**. If using a new replacement drive unit, ensure that you attach the strip of self-adhesive gasket around the inside of the chassis mounting flange, as this ensures an air-tight seal. The gasket needs to be cut to length as it is supplied oversized.
4. Reinstall the grille and re-screw in place before sticking the foam back down.

i-8: Rear Low Frequency Drive Units

1. Follow the procedure above to remove the required front drive units.
2. Using a 3mm Allen key, undo the M5 countersunk machine screws holding the rear door in place. Remove this door and carefully disconnect the crimp connectors from the spade terminals on the NL4 connectors.
3. Using a 10mm socket, undo the four M6 hex head bolts holding the drive unit in place. Disconnect the cables, and lift the drive unit clear – ensuring to retain the four bolts, eight washers (shakeproof and flat for each bolt) and the four speaker clamps for future reinstatement.
4. To reinstate the drive unit, carefully place it into the locating slot, then simply reverse the above procedure. Please observe the correct polarity – **red cable to positive terminal, black cable to negative** – and observe that this is different to the front pair of drive units. If using a new replacement drive unit, ensure that you attach the strip of self-adhesive gasket around the inside of the chassis mounting flange, as this ensures an air-tight seal. The gasket needs to be cut to length as it is supplied oversized.
5. Re-attach the crimp connectors to the NL4 spades (red cable to 1+, black cable to 1-) and screw the door back down again, ensuring that the door sits flush with the rear of the enclosure.

i-12: Front Low Frequency Drive Units

1. Carefully remove the foam from the grilles – it is held in place with Velcro fasteners. Using a No.2 Pozidrive screwdriver, undo the Pozidrive screws holding each grille in place, then remove the grilles to gain access to the drive units.
2. Using a 10mm socket, undo the four M6 Nyloc nuts holding the drive unit in place. Disconnect the cables, and lift the drive unit clear – ensuring to retain the four nuts, eight washers (shakeproof and flat for each bolt) and the four speaker clamps for future reinstatement.
3. To reinstate the drive unit, carefully place it into the locating slot, then simply reverse the above procedure. Please observe the correct (yet unusual) polarity – **red cable to negative terminal, black cable to positive**.
4. Reinstall the grille and re-screw in place before sticking the foam back down.

i-12: Rear Low Frequency Drive Units

1. Follow the procedure above to remove the required front drive units – the rear units cannot be removed with the front units still in place.
2. Using a 3mm Allen key, undo the M5 countersunk machine screws holding the rear door in place. Remove this door and carefully disconnect the crimp connectors from the spade terminals on the NL4 connectors.
3. Using a 10mm socket, undo the four M6 hex head bolts holding the drive unit in place. Disconnect the cables, and lift the drive unit clear – ensuring to retain the four bolts, eight washers (shakeproof and flat for each bolt) and the four speaker clamps for future reinstatement.
4. To reinstate the drive unit, carefully place it into the locating slot, then simply reverse the above procedure. Please observe the correct polarity – **red cable to positive terminal, black cable to negative** – and observe that this is different to the front pair of drive units.
5. Re-attach the crimp connectors to the NL4 spades (red cable to 1+, black cable to 1-) and screw the door back down again, ensuring that the door sits flush with the rear of the enclosure.

WARRANTY

Limited Warranty

This EM Acoustics loudspeaker product is warranted to the original end-user purchaser and all subsequent owners for a period of **three years** from the original date of purchase.

Warranty Coverage

This warranty covers defects in materials and workmanship. It does not include:

- Damage or failure caused by accident, misuse, neglect, abuse or modification by any person other than an authorised EM Acoustics representative.
- Damage or failure caused by operating the loudspeaker product contrary to the instructions contained within this manual.
- Damage caused during shipment.
- Claims based on any misrepresentation by the seller.
- Products which contain anything other than the original components (or EM Acoustics factory supplied spare parts).
- Products on which the serial number has been removed, altered or defaced.

Returning your EM Acoustics loudspeaker

Should your EM Acoustics loudspeaker develop a fault, please return it (freight prepaid) in its original packaging, along with proof of purchase to your local dealer or to:

EM Acoustics (Returns Department), Building 74, Dunsfold Park, Cranleigh, Surrey, GU6 8TB, UK

including a description of the suspected fault. Serial numbers must be quoted in all correspondence relating to the claim. EM Acoustics or its representatives are in no way liable for any loss or damage in transit, and hence it is recommended that the sender insure the shipment. EM Acoustics will pay for return freight should the repair be covered under warranty.

EM Acoustics' liability is to the replacement or repair (at our discretion) of any defective components, and as such are not liable for any incidental and consequential damages including (without limitation) injury to persons, damage to property or loss of use.

This warranty is exclusive and no other warranty is expressed or implied. This warranty is also in addition to – and in no way detracts from – your statutory rights as a consumer.

APPENDIX A – TECHNICAL SPECIFICATIONS

EM Acoustics operates a continuous process of research and development, and as such reserves the right to alter specifications without notice.

i-1

Enclosure Type:	compact fullrange enclosure
Dimensions (HxWxD, mm/ins):	130/5.1 x 130/5.1 x 167/6.6
Net Weight:	2kg
Frequency Response (+/- 3dB):	125Hz – 20KHz (with active high pass filter @ 125Hz)
Sensitivity:	86dB, 1W/1m
Dispersion:	75°H x 75°V
Drive Units:	4" (102mm) titanium cone drive unit
Power Handling:	40W RMS, 80W Program
Maximum SPL:	102dB continuous, 108dB peak
Nominal Impedance:	8 ohms
Crossover:	Active, recommended @ 125Hz
Connectors:	4mm Binding Posts
Enclosure:	12mm (1/2") Finnish Birch plywood
Rigging/Suspension:	4 x M5 threaded fittings
Grille:	Perforated steel
Options:	Colours
Spares & Accessories:	DU-401 replacement drive unit RG-I1 replacement grille/acoustic ring assembly YK-I1 replacement i-1 yoke XO-I1 passive circuitry

Enclosure Type:	compact fullrange enclosure
Dimensions (HxWxD, mm/ins):	151/5.9 x 470/18.5 x 192/7.6
Net Weight:	9kg
Frequency Response (+/- 3dB):	90Hz – 18KHz
Sensitivity:	91dB, 1W/1m
Dispersion:	90°H x 20°V (rotatable)
Drive Units:	2 x 5" (127mm) LF/MF cone drive units 1 x 1" x 4" planar wave HF drive unit
Power Handling:	200W RMS, 400W Program
Maximum SPL:	110dB continuous, 116dB peak
Nominal Impedance:	4 ohms
Crossover:	Uniphase Internal Passive.
Connectors:	2 x Neutrik Speakon™ NL4MP
Enclosure:	15mm (5/8") Finnish Birch plywood
Rigging/Suspension:	4 x M6 threaded fittings (Omnimount/Powerdrive) 2 x M10 threaded fixings (YK-i2h) 2 x M8 threaded fixings (YK-i2) 2 x 3/8" threaded fixings (microphone stand)
Grille:	Perforated steel
Options:	Colours
Spares & Accessories:	DU-501 replacement LF/MF drive unit PWD-410 replacement planar wave HF drive unit WG-i2 replacement diecast waveguide RG-I2 replacement grille PX-I2 passive circuitry YK-i2 vertical hanging yoke YK-i2h horizontal hanging yoke

Enclosure Type:	compound isobaric subwoofer
Dimensions (HxWxD, mm/ins):	308/12.1 x 530/20.9 x 450/17.7
Net Weight:	28kg
Frequency Response (+/- 3dB):	35Hz – 150Hz
Sensitivity:	93dB, 1W/1m
Drive Units:	4 x 8" (203mm) LF cone drive units
Power Handling:	600W RMS, 1200W Program
Maximum SPL:	122dB continuous, 128dB peak
Nominal Impedance:	4 ohms
Crossover:	Active, recommended below 125Hz
Connectors:	2 x Neutrik Speakon™ NL4MP
Enclosure:	15mm (5/8") Finnish Birch plywood
Rigging/Suspension:	16 x M10 threaded fittings
Grille:	Acoustically transparent black foam on perforated steel
Options:	Colours Connectors
Spares & Accessories:	DU-803 replacement LF drive unit RK-803 re-cone kit for DU-803 RFG-I8 replacement foam/grille pair

Enclosure Type:	compound isobaric subwoofer
Dimensions (HxWxD, mm/ins):	420/16.5 x 823/32.3 x 700/27.6
Net Weight:	83kg
Frequency Response (+/- 3dB):	27Hz – 100Hz
Sensitivity:	93dB, 1W/1m
Drive Units:	4 x 12" (305mm) LF cone drive units
Power Handling:	1000W RMS, 2000W Program
Maximum SPL:	128dB continuous, 136dB peak
Nominal Impedance:	2 ohms
Crossover:	Active, recommended below 100Hz
Connectors:	2 x Neutrik Speakon™ NL4MP
Enclosure:	18mm (5/8") Finnish Birch plywood
Grille:	Acoustically transparent black foam on perforated steel
Options:	Colours Connectors
Spares & Accessories:	DU-1204 replacement LF drive unit RK-1204 re-cone kit for DU-803 RFG-I12 replacement foam/grille pair DA-1 Amplifier Module